

CLAIMS

1. A selectively extensible jack assembly comprising:

an upper jack tube adapted to be connected to a structure;

a lower jack tube telescopically engaging said upper jack tube, said lower jack tube including a ground engaging member;

a jack screw axially disposed within said upper and said lower jack tube;

means drivably connected to said jack screw for selectively rotating said jack screw in a first and a second direction; and

a screw nut threadably engaging said jack screw, said screw nut positionally captured within a nut retainer seated within an upper end of said lower jack tube wherein rotation of said jack screw in said first direction will drive said screw nut and said retainer downwardly telescopically extending said jack assembly and rotation of said jack screw in said second direction will move said screw nut and said retainer upwardly telescopically contracting said jack assembly.

2. The jack assembly as defined in claim 1 wherein said screw nut has a diameter substantially less than the diameter of said lower jack tube.

3. The jack assembly as defined in claim 2 wherein said nut retainer has a circumferential configuration

corresponding to a cross-sectional configuration of said lower jack tube.

4. The jack assembly as defined in claim 3 wherein said nut retainer includes a lateral slot open to one edge of said nut retainer, said slot formed by upper and lower spaced apart shoulders and side walls, said screw nut positionally captured within said slot.

5. The jack assembly as defined in claim 4 wherein said screw nut has a plurality of flat edges and said slot of said nut retainer has a corresponding plurality of flat surfaces formed in said side walls of said slot, said flat surfaces engaging said flat edges to prevent rotation of said screw nut within said retainer.

6. The jack assembly as defined in claim 3 wherein said retainer nut includes at least one peripheral flange, said at least one peripheral flange engaging the top of said lower jack tube upon seating of said retainer within said lower jack tube.

7. The jack assembly as defined in claim 6 and further comprising at least one shoulder formed in said retainer, said jack tube engaging said at least one shoulder to prevent withdrawal of said retainer from said lower jack tube.

8. A selectively extensible jack assembly comprising:

an upper jack tube adapted to be connected to a structure;

a lower jack tube telescopically received within said upper jack tube, said lower jack tube including a ground engaging member;

a jack screw extending axially through said upper and said lower jack tube;

drive means connected to said jack screw for selectively rotating said jack screw in a first direction and a second direction; and

a screw nut threadably engaging said jack screw, said screw nut having a diameter substantially smaller than a diameter of said lower jack tube, said screw nut positionally captured within a nut retainer, said nut retainer nestingly received within an upper end of said lower jack tube and disposed within said upper jack tube wherein rotation of said jack screw in said first direction will drive said screw nut and said retainer downwardly to telescopically extend said jack assembly and rotation of said jack screw in said second direction will move said screw nut and said retainer upwardly along said jack screw to telescopically contract said jack assembly.

9. The jack assembly as defined in claim 8 wherein said nut retainer has a circumferential configuration corresponding to a cross-sectional configuration of said lower jack tube.

10. The jack assembly as defined in claim 9 wherein said nut retainer includes a lateral slot open to one edge of said nut retainer, said slot formed by upper and lower spaced apart shoulders and side walls, said screw nut positionally captured within said slot.

11. The jack assembly as defined in claim 10 wherein said screw nut has a plurality of flat edges and said slot of said nut retainer has a corresponding plurality of flat surfaces formed in said side walls of said slot, said flat surfaces engaging said flat edges to prevent rotation of said screw nut within said retainer.

12. The jack assembly as defined in claim 11 wherein said retainer nut includes at least one peripheral flange, said at least one peripheral flange engaging the top of said lower jack tube upon seating of said retainer within said lower jack tube.

13. The jack assembly as defined in claim 12 and further comprising at least one shoulder formed in said retainer, said jack tube engaging said at least one shoulder to prevent withdrawal of said retainer from said lower jack tube.